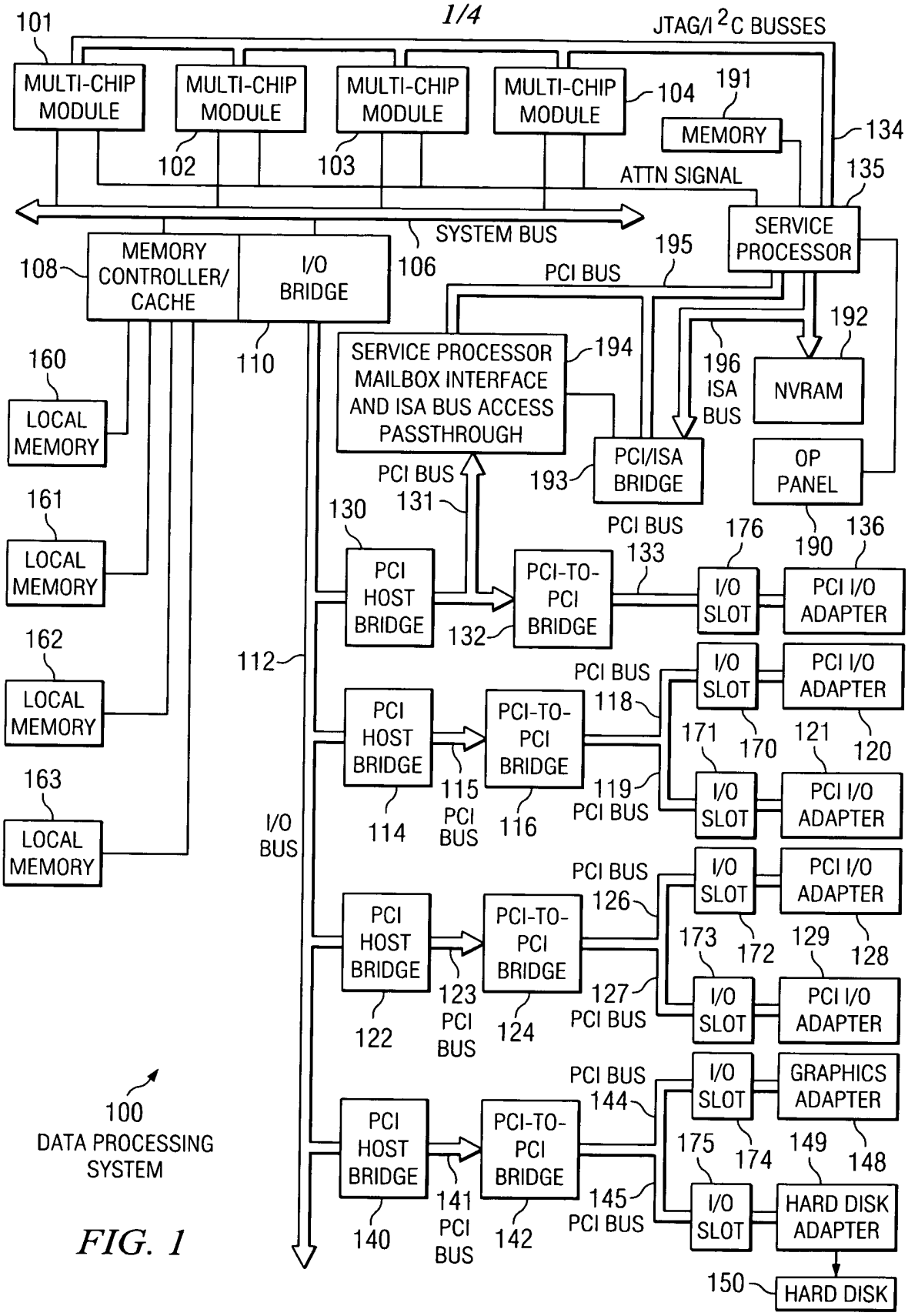
101
JTAG/I 2C BUSSES
MULTI-CHIP MODULE
MULTI-CHIP MODULE
MULTI-CHIP MODULE
MULTI-CHIP MODULE
104
191
MEMORY
134
102
103
ATTN SIGNAL
135
SYSTEM BUS
SERVICE PROCESSOR
108
MEMORY CONTROLLER/ CACHE
I/O BRIDGE
106
195
PCI BUS
192
110
SERVICE PROCESSOR MAILBOX INTERFACE AND ISA BUS ACCESS PASSTHROUGH
194
196 ISA BUS
NVRAM
160
LOCAL MEMORY
PCI BUS
193
PCI/ISA BRIDGE
OP PANEL
161
LOCAL MEMORY
130
131
PCI BUS
176
190
136
133
PCI HOST BRIDGE
PCI-TO-PCI BRIDGE
I/O SLOT
PCI I/O ADAPTER
132
162
LOCAL MEMORY
112
PCI BUS
118
I/O SLOT
PCI I/O ADAPTER
PCI HOST BRIDGE
PCI-TO-PCI BRIDGE
171
170
121
120
163
LOCAL MEMORY
115
PCI BUS
119
PCI BUS
I/O SLOT
PCI I/O ADAPTER
I/O BUS
114
116
PCI BUS
126
I/O SLOT
PCI I/O ADAPTER
PCI HOST BRIDGE
PCI-TO-PCI BRIDGE
173
172
129
128
123
PCI BUS
127
PCI BUS
I/O SLOT
PCI I/O ADAPTER
122
124
PCI BUS
144
I/O SLOT
GRAPHICS ADAPTER
100
DATA PROCESSING SYSTEM
PCI HOST BRIDGE
PCI-TO-PCI BRIDGE
175
174
149
148
141
PCI BUS
145
PCI BUS
I/O SLOT
HARD DISK ADAPTER
140
142
150
HARD DISK

FIG. 1

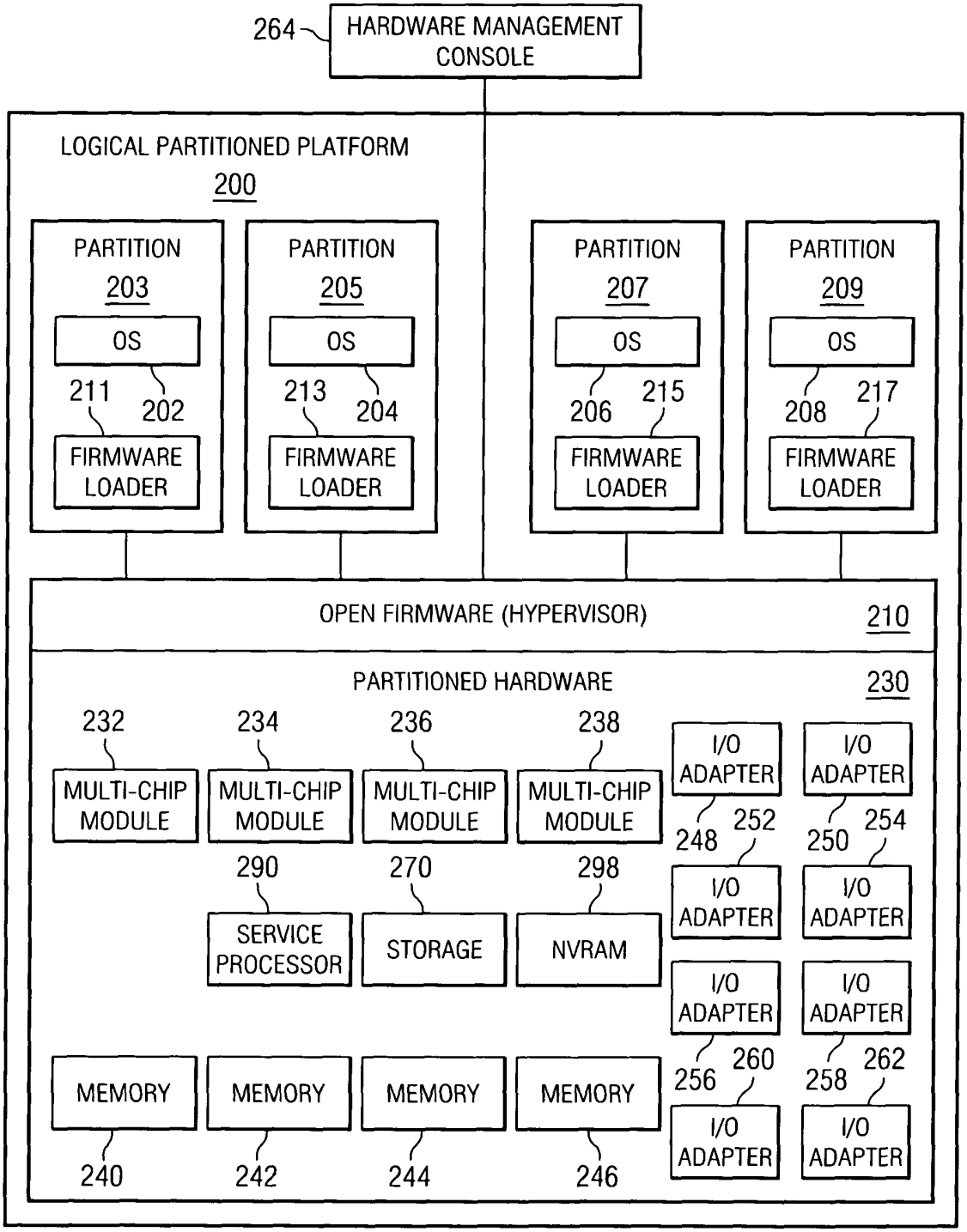
264
HARDWARE MANAGEMENT CONSOLE
LOGICAL PARTITIONED PLATFORM
200
PARTITION
203
OS
211
202
FIRMWARE LOADER
PARTITION
205
OS
213
204
FIRMWARE LOADER
PARTITION
207
OS
206
215
FIRMWARE LOADER
PARTITION
209
OS
208
217
FIRMWARE LOADER
OPEN FIRMWARE (HYPERVISOR)
210
PARTITIONED HARDWARE
230
232
MULTI-CHIP MODULE
234
MULTI-CHIP MODULE
236
MULTI-CHIP MODULE
238
MULTI-CHIP MODULE
290
SERVICE PROCESSOR
270
STORAGE
298
NVRAM
MEMORY
240
MEMORY
242
MEMORY
244
MEMORY
246
I/O ADAPTER
248
I/O ADAPTER
252
I/O ADAPTER
256
I/O ADAPTER
260
I/O ADAPTER
250
I/O ADAPTER
254
I/O ADAPTER
258
I/O ADAPTER
262

FIG. 2

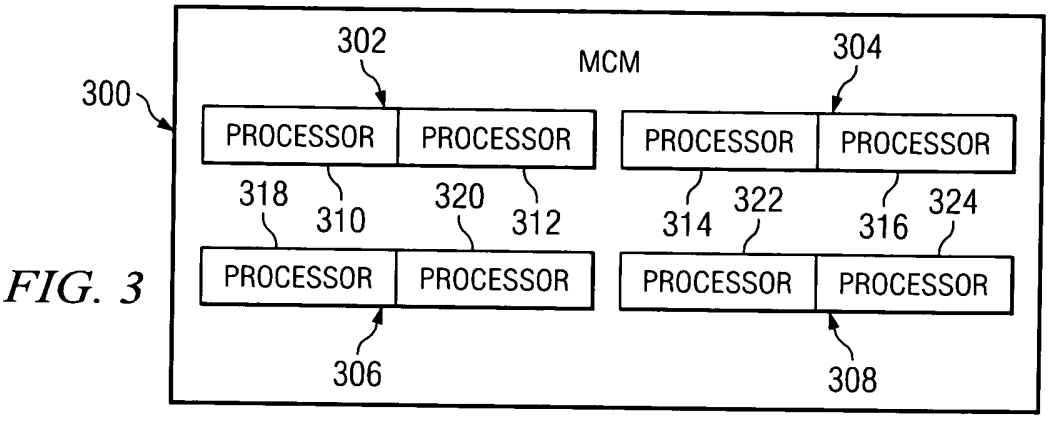

FIG. 3

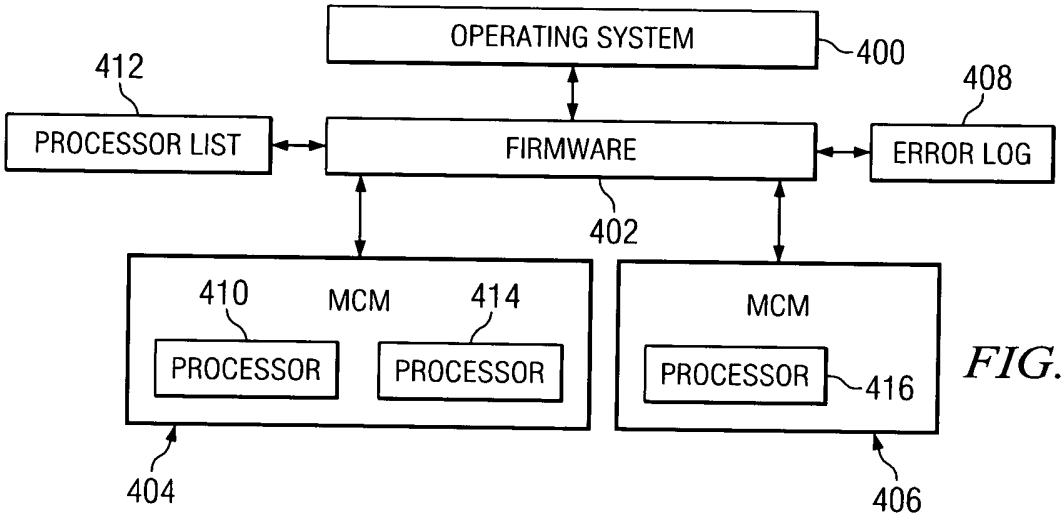

FIG. 4

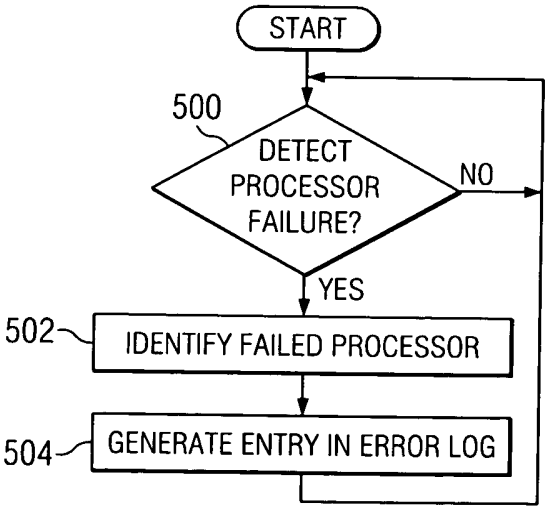

FIG. 5

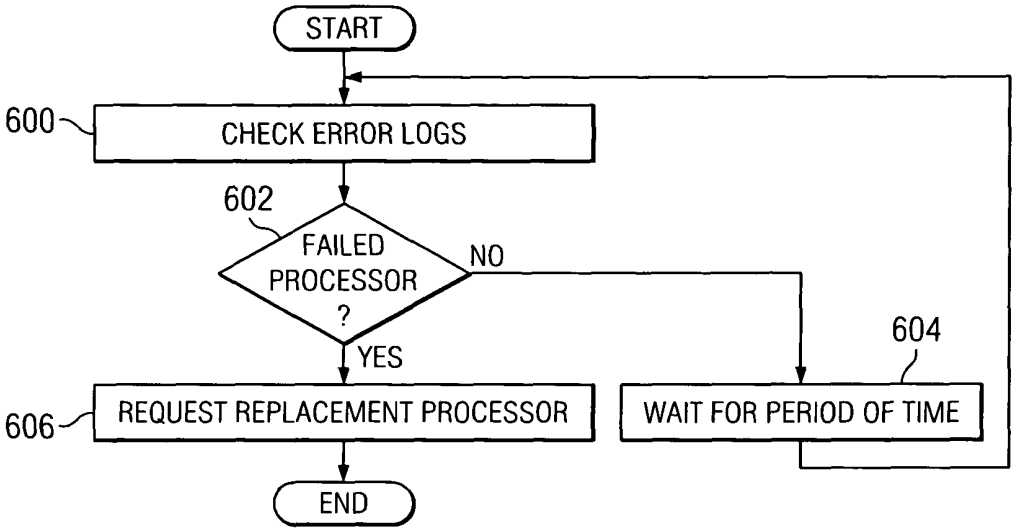
START
600
CHECK ERROR LOGS
602
FAILED PROCESSOR ?
NO
YES
604
606
REQUEST REPLACEMENT PROCESSOR
WAIT FOR PERIOD OF TIME
END

FIG. 6

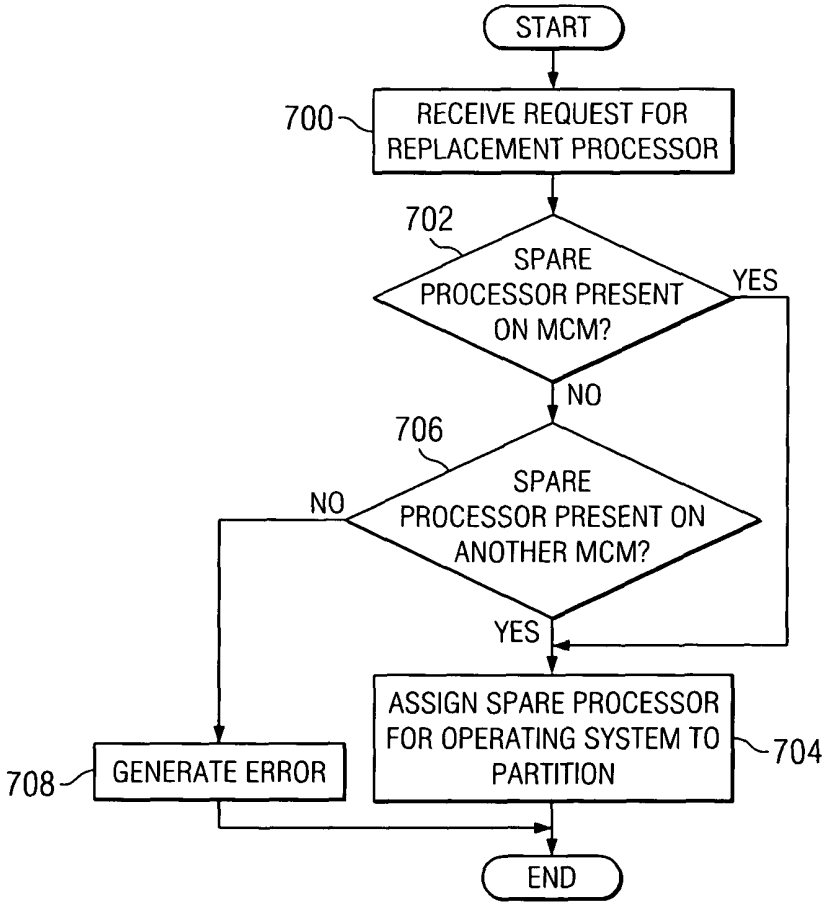
START
700
RECEIVE REQUEST FOR REPLACEMENT PROCESSOR
702
SPARE PROCESSOR PRESENT ON MCM?
YES
NO
706
SPARE PROCESSOR PRESENT ON ANOTHER MCM?
NO
YES
ASSIGN SPARE PROCESSOR FOR OPERATING SYSTEM TO PARTITION
704
708
GENERATE ERROR
END

FIG. 7